

# Municipal Vulnerability Preparedness Program Listening Session

City of Methuen, MA

June 11, 2019

Methuen City Hall





# Today's Presentation

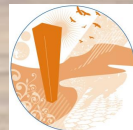
MVP Program Background

Workshop Process

Climate Change Projections

MVP Recommendations

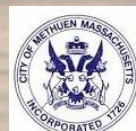
Open Questions and Comment Period



# Governor Baker's Executive Order 569

September 2016, directed the state to assist municipalities to reduce vulnerability and improve resilience to climate change

1. MA Climate Change Clearinghouse
2. MA State Hazard Mitigation and Climate Adaptation Plan (in development)
3. Municipal Vulnerability Preparedness (MVP) Grant Program
  - ✓ Technical assistance to achieve certification
  - ✓ Implementation funds for certified municipalities





# Climate Change Clearinghouse

## www.resilientma.org

MA Climate Change Clearinghouse X

www.resilientma.org

resilient MA  
Climate Change Clearinghouse for the Commonwealth

Explore Sectors Identify Changes Take Action

Maps Data Documents

Search for resources... Search

Providing the most up-to-date climate change science and decision-support tools for the Commonwealth. [More »](#)

### Take Action

Temperatures are climbing, precipitation is becoming more intense, sea level is rising and extreme weather is becoming more frequent. The Commonwealth is working across state government and with our cities and towns to reduce climate change emissions, understand local climate change impacts, and build 351 resilient communities.

[More »](#)

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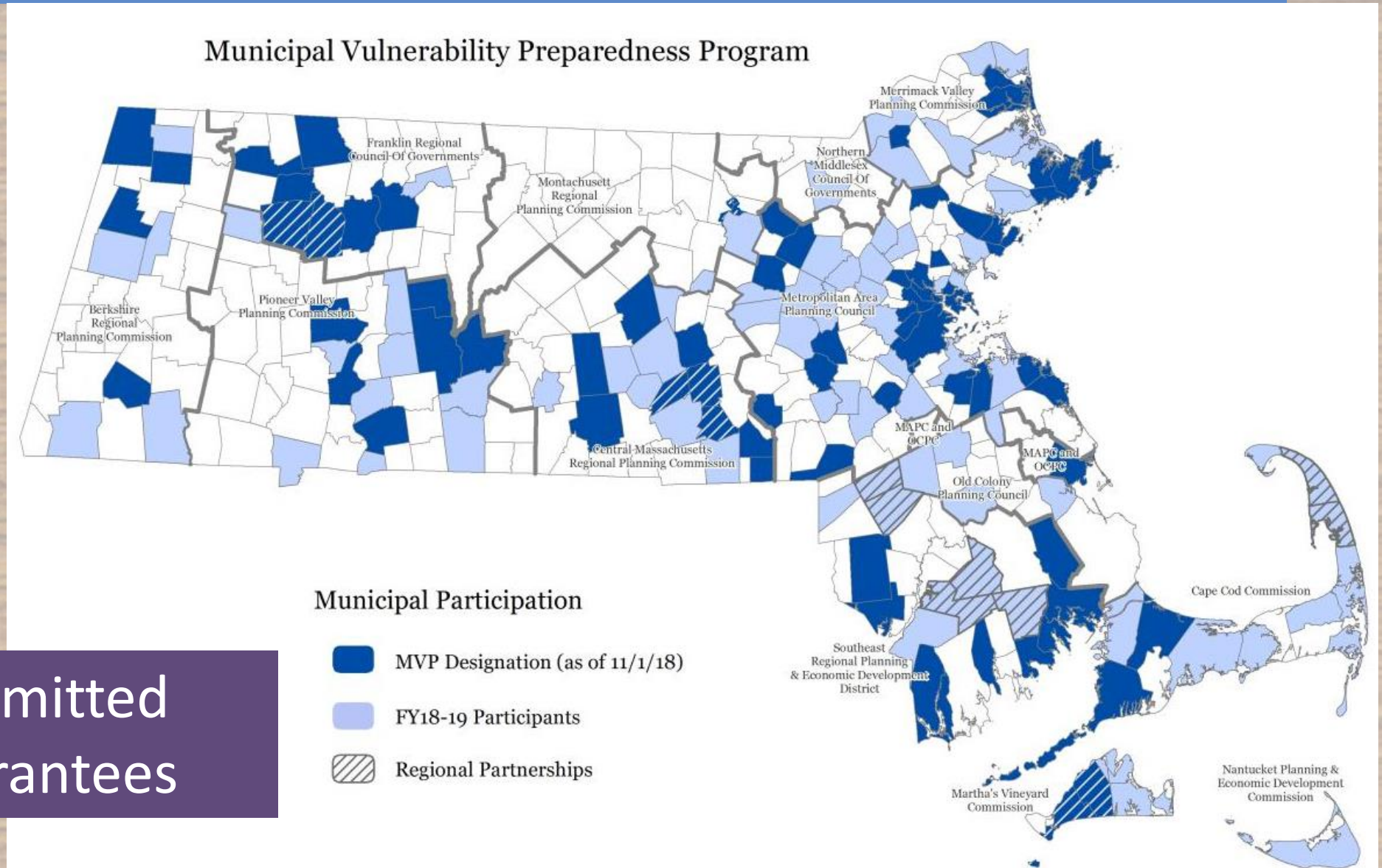
# Massachusetts State Hazard Mitigation and Climate Adaptation Plan



Adopted September 17, 2018



# MVP Grantees to Date



Over \$17 committed  
to the MVP Grantees



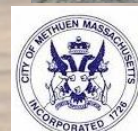
# MA Climate Change Legislation

## \$2.4 Billion Environmental Bond Bill

Signed August 21, 2018

- climate change preparedness
- environmental protection
- community investments

\$75 Million for MVP Program

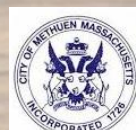




# Resilience & Adaptation

## Goal for the Workshop

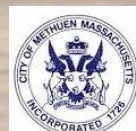
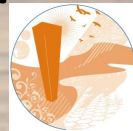
To identify the 5-7 Highest Priority actions  
that the City of Methuen should take  
to increase *resilience* and *adapt* to climate change





# Responses to Climate Change

- Vulnerability:** the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes
- Resilience:** the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions
- Adaptation:** the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities.

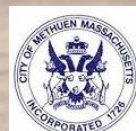




# Workshop Format— vibrant discussion



- Presentation to **set the stage** for our discussion
- Determine **climate change hazards** to focus on
- Identify the most **vulnerable features** in Methuen
- Identify the **features that provide strength**
- Develop **actions** – what can the city do to address vulnerabilities and protect/enhance strengths?
- Prioritize the **most important actions** for Methuen





# Overview of Climate Change Projections

Temperature

Precipitation

Extreme Weather Events

Projections developed by:

Northeast Climate Science Center at Umass.

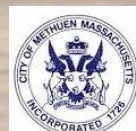
Downscaled projections specifically for MA counties and major watersheds.





# Survey Says... Most Vulnerable:

Infrastructure:	Damage/loss of roads, bridges, utilities, schools, etc.
People:	Loss of life and/or injuries
Economic:	Business interruptions, closures, job losses, personal property damage
Environment:	Damage, contamination or loss of resource areas
Cultural/Historic:	Damage or loss to historic properties, neighborhood character
Governance:	Ability to maintain order and/or provide public amenities and services





# Natural Hazards Considered Most Pressing:

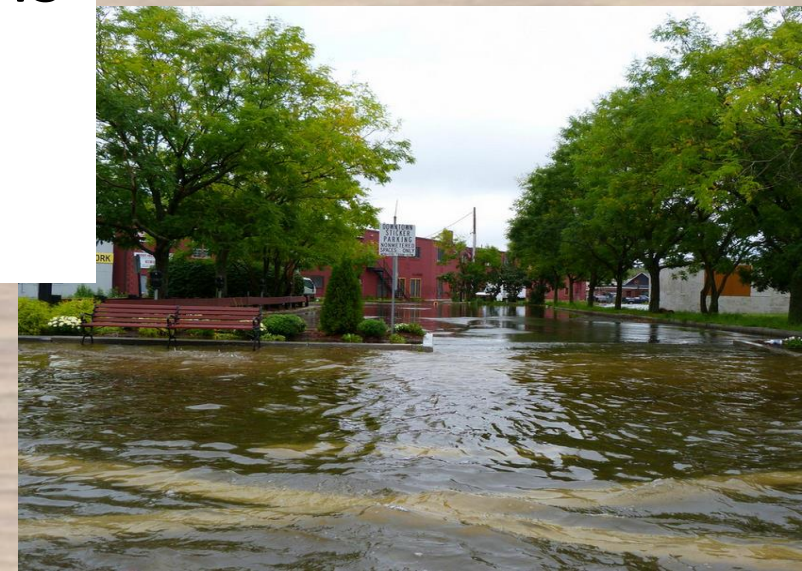
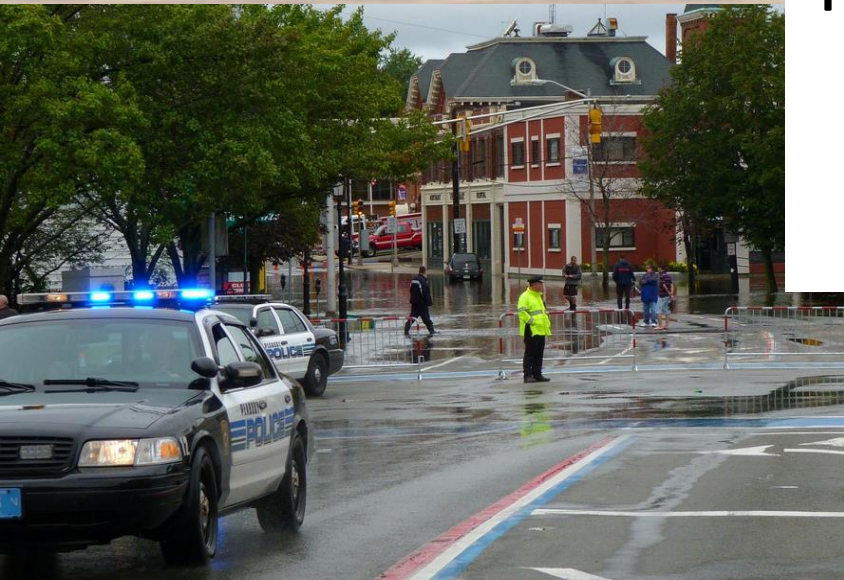


Nor-Easters

Flooding

Hurricanes/Tropical Storms

Dam Failure





# What Types of Actions Could We Take?

Engineering/Construction

Protection/Conservation

Retreat/Avoidance

Preparations/Planning

Policy/Regulatory Changes

*[Short-term, Long-term, ongoing]*



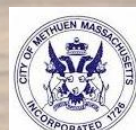
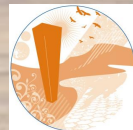
<https://streamprojects.wordpress.com/2007/05/15/dingle-road-culvert-replacement-bronson-brook-worthington-ma/>





# MVP Workshop Recommendations

- 7 top recommendations emerged
- Prioritization process:
  - Process of break out discussion
  - Full group discussion
  - “Dot voting” process and final deliberation





# MVP Workshop Recommendations

## **RECOMMENDATION 1:**

### Outreach/Communication with Special/Vulnerable Populations:

- Establish Emergency Management Team (Government Staff)
- Better Municipal Communication across the board (in various languages, including social media)
- Establish Partnerships
- Funding for emergency supplies
- Smart 911
- 311 System
- Signage & Wayfinding for shelter access





# MVP Workshop Recommendations...

## **RECOMMENDATION 2:**

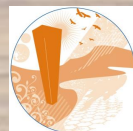
### Water Supply:

- Drinking Water and Fire: Explore additional sources and evaluate intake based on failure

## **RECOMMENDATION 3:**

### Open Space:

- Identify grant funds and donations
- Pass Community Preservation Act





# MVP Workshop Recommendations...

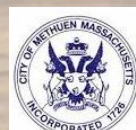
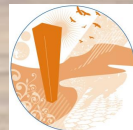
## **RECOMMENDATION 4 (Tie):**

Purchase a new ambulance

Street Tree Assessment and Re-planting Initiative

Spicket River:

- Upgrade floodgates
- Vulnerability assessment





# MVP Workshop Recommendations...

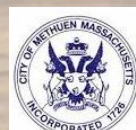
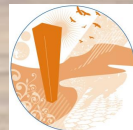
## **RECOMMENDATION 5 (Tie):**

Relocate DPW Facility:

- Advance conceptual design
- Finalize site

Storm Drainage:

- Assessment of Infrastructure
- Develop and implement stormwater management plan
- Explore Stormwater Utility Fee
- Combined sewer overflows – re-evaluate the situation, what is needed and where





# MVP Workshop Recommendations...

## **RECOMMENDATION 6:**

Erosion:

- Upgrade culverts
- Develop and implement preventative maintenance plan for culverts

## **RECOMMENDATION 7 (Tie):**

Implement regulations to prohibit location of assisted/elderly housing in the floodplain

Study of public safety facility location(s) to maximize/optimize the ability to respond to emergencies city-wide





# Questions and Comments?

The Final MVP Workshop Summary report  
will be available online

[www.cityofmethuen.net](http://www.cityofmethuen.net)

